

⑨



Europäisches Patentamt

European Patent Office

Office européen des brevets

⑪ Publication number:

**0 306 347
A3**

⑫

EUROPEAN PATENT APPLICATION

⑲ Application number: 88308187.9

⑤① Int. Cl.³: A61K 31/70

⑳ Date of filing: 05.09.88

⑳ Priority: 04.09.87 US 93523
07.07.88 US 220765
29.08.88 US 237019

㉑ Date of publication of application:
08.03.89 Bulletin 89/10

㉒ Designated Contracting States:
AT BE CH DE ES FR GB GR IT LI LU NL SE

㉓ Date of deferred publication of the search report:
03.10.90 Bulletin 90/40

㉔ Applicant: HEM RESEARCH, INC.
12280 Wilkins Avenue P.O. Box 2245
Rockville, MD 20852(US)

㉕ Inventor: Carter, William A.
1, Jaine Lane
Birchrunville Pennsylvania 19421(US)

㉖ Representative: Hallybone, Huw George et al
CARPMAELS AND RANSFORD 43
Bloomsbury Square
London WC1A 2RA(GB)

㉗ **Diagnosis and treatment of double-stranded RNA deficiency states.**

㉘ The use of a double-stranded RNA (dsRNA) for the manufacture of medicament for the treatment of a dsRNA deficient disease state other than an HIV infection or a cancer. Specific such disease states include chronic fatigue syndrome and hepatitis infections.

EP 0 306 347 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 88 30 8187

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. CL 4)
E	EP-A-0 299 745 (HEM RESEARCH, INC.) * Column 5, lines 12-21 *	1-7	A 61 K 31/70
D,E	EP-A-0 285 263 (HEM RESEARCH, INC.) * As a whole *	1-7	
E	EP-A-0 308 066 (HEM RESEARCH, INC.) * As a whole, especially page 3, lines 22-39; claims *	1-7	
D,X	THE LANCET, 6th June 1987, 1/8545, pages 1286-1292; W.A. CARTER et al.: "Clinical, immunological, and virological effects of ampligen, a mismatched double-stranded RNA, in patients with AIDS or AIDS-related complex" * The whole article *	1-7	
D,X	EP-A-0 213 921 (HEM RESEARCH, INC.) * The whole document *		TECHNICAL FIELDS SEARCHED (Int. CL4)
P,X	PROCEEDINGS OF THE ANNUAL MEETING OF THE AMERICAN SOCIETY OF CLINICAL ONCOLOGY, New Orleans, Louisiana, 22nd-24th May 1988, vol. 7, March 1988, page 2, abstract no. A6; D.R. STRAYER et al.: "Clinical improvement and immunological/virological effects of ampligen therapy in ARC/pre-ARC patients" * Abstract *	1,3	A 61 K C 07 H C 12 Q
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11-07-1990	Examiner FOERSTER W.K.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons * : member of the same patent family, corresponding document			



European Patent
Office

EUROPEAN SEARCH REPORT

Page 2

Application Number

EP 88 30 8187

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
X	PROCEEDINGS OF THE ANNUAL MEETING OF THE AMERICAN SOCIETY OF CLINICAL ONCOLOGY, Atlanta, Georgia, 17th-19th May 1987, vol. 6, March 1987, page 2, abstract no. A8; W.A. CARTER et al.: "Clinical improvement of patients with HIV-related immune dysfunction on mismatched dsRNA (ampligen) therapy" * Abstract * ---	1,3	
X	JOURNAL OF BIOLOGICAL RESPONSE MODIFIERS, vol. 4, 1985, pages 699-675, Raven Press, New York, US; I. BRODSKY et al.: "Clinical studies with ampligen (Mismatched double-stranded RNA)" * Page 673 * ---	1,3	
D,X	AIDS RESEARCH, vol. 2, no. 2, 1986, pages 127-131, Mary Ann Liebert Inc.; J.M. WU et al.: "Diagnostic value of the determination of an interferon-induced enzyme activity: decreased 2',5'-oligoadenylate dependent binding protein activity in aids patient lymphocytes" * The whole article * ---	1-7	
D,Y	NUCLEIC ACIDS RESEARCH, vol. 9, no. 7, 1981, pages 1571-1581, IRL Press, Ltd, London, GB; D.H. WRESCHNER et al.: "Ribosomal RNA cleavage, nuclease activation and 2-5A (ppp(A2'p)nA) in interferon-treated cells" * The whole article * --- -/-	1-7	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
Place of search THE HAGUE		Date of completion of the search 11-07-1990	Examiner FOERSTER W.K.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P0401)



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
D,Y	CELL, vol. 43, 1985, pages 793-800; J.N. ZULLO et al.: "Platelet-derived growth factor and double-stranded ribonucleic acids stimulate expression of the same genes in 3T3 cells" * The whole article *	1-7	
D,Y	EUROPEAN J. BIOCHEM., vol. 143, 1984, pages 165-174; P.J. CAYLEY et al.: "Activation of the ppp(A2'p)nA system in interferon-treated, Herpes simplex virus-infected cells and evidence for novel inhibitors of the ppp(A2'p)nA-dependent RNase" * The whole article *	1-7	
A	ARCH. INTERN. MED., vol. 126, July 1970, pages 109-124; M.R. HILLEMAN: "Double-stranded RNAs (poly I:C) in the prevention of viral infections" * The whole document *	1-7	
D,A	PROC. NATL. ACAD. SCI. USA, vol. 84, February 1987, pages 658-662; A. DE BENEDETTI et al.: "Loss of (2'-5')oligoadenylate synthetase activity by production of antisense RNA results in lack of protection by interferon from viral infections" * The whole document *	1-7	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
Place of search THE HAGUE		Date of completion of the search 11-07-1990	Examiner FOERSTER W.K.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			